



2

1

	Leu	His	Leu	Asn	Asp	Asn	Pro	Leu	Gly	Asp	Glu	Gly	Leu	Lys	Leu	Leu	
			115					120					125				
	Cys	Glu	Gly	Leu	Arg	Asp	Pro	Gln	Cys	Arg	Leu	Glu	Lys	Leu	Gln	Leu	
		130					135					140					
5	Glu	Tyr	Cys	Asn	Leu	Thr	Ala	Thr	Ser	Cys	Glu	Pro	Leu	Ala	Ser	Val	
	145					150					155					160	
	Leu	Arg	Val	Lys	Pro	Asp	Phe	Lys	Glu	Leu	Val	Leu	Ser	Asn	Asn	Asp	
					165					170					175		
	Phe	His	Glu	Ala	Gly	Ile	His	Thr	Leu	Cys	Gln	Gly	Leu	Lys	Asp	Ser	
				180					185					190			
10	Ala	Cys	Gln	Leu	Glu	Ser	Leu	Lys	Leu	Glu	Asn	Cys	Gly	Ile	Thr	Ser	
			195					200					205				
	Ala	Asn	Cys	Lys	Asp	Leu	Cys	Asp	Val	Val	Ala	Ser	Lys	Ala	Ser	Leu	
		210					215					220					
15	Gln	Glu	Leu	Asp	Leu	Gly	Ser	Asn	Lys	Leu	Gly	Asn	Thr	Gly	Ile	Ala	
	225					230					235					240	
	Ala	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Pro	Ser	Cys	Arg	Leu	Arg	Thr	Leu	
					245					250					255		
	Trp	Leu	Trp	Asp	Cys	Asp	Val	Thr	Ala	Glu	Gly	Cys	Lys	Asp	Leu	Cys	
				260					265					270			
20	Arg	Val	Leu	Arg	Ala	Lys	Gln	Ser	Leu	Lys	Glu	Leu	Ser	Leu	Ala	Gly	
			275					280					285				
	Asn	Glu	Leu	Lys	Asp	Glu	Gly	Ala	Gln	Leu	Leu	Cys	Glu	Ser	Leu	Leu	
		290					295					300					
25	Glu	Pro	Gly	Cys	Gln	Leu	Glu	Ser	Leu	Trp	Val	Lys	Thr	Cys	Ser	Leu	
	305					310					315					320	
	Thr	Ala	Ala	Ser	Cys	Pro	His	Phe	Cys	Ser	Val	Leu	Thr	Lys	Asn	Ser	
					325					330					335		

Ser Leu Phe Glu Leu Gln Met Ser Ser Asn Pro Leu Gly Asp Ser Gly
 340 345 350
 Val Val Glu Leu Cys Lys Ala Leu Gly Tyr Pro Asp Thr Val Leu Arg
 355 360 365
 5 Val Leu Trp Leu Gly Asp Cys Asp Val Thr Asp Ser Gly Cys Ser Ser
 370 375 380
 Leu Ala Thr Val Leu Leu Ala Asn Arg Ser Leu Arg Glu Leu Asp Leu
 385 390 395 400
 Ser Asn Asn Cys Met Gly Asp Asn Gly Val Leu Gln Leu Leu Glu Ser
 405 410 415
 10 Leu Lys Gln Pro Ser Cys Ile Leu Gln Gln Leu Val Leu Tyr Asp Ile
 420 425 430
 Tyr Trp Thr Asp Glu Val Glu Asp Gln Leu Arg Ala Leu Glu Glu Glu
 435 440 445
 15 Arg Pro Ser Leu Arg Ile Ile Ser
 450 455
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 <211> 456
 <212> PRT
 <213> Sus sp.
 20 <400> 2
 Met Asn Leu Asp Ile His Cys Glu Gln Leu Ser Asp Ala Arg Trp Thr
 1 5 10 15
 Glu Leu Leu Pro Leu Leu Gln Gln Tyr Glu Val Val Arg Leu Asp Asp
 20 25 30
 25 Cys Gly Leu Thr Glu Glu His Cys Lys Asp Ile Gly Ser Ala Leu Arg
 35 40 45
 Ala Asn Pro Ser Leu Thr Glu Leu Cys Leu Arg Thr Asn Glu Leu Gly
 50 55 60

	Asp	Ala	Gly	Val	His	Leu	Val	Leu	Gln	Gly	Leu	Gln	Ser	Pro	Thr	Cys	
	65					70					75					80	
	Lys	Ile	Gln	Lys	Leu	Ser	Leu	Gln	Asn	Cys	Ser	Leu	Thr	Glu	Ala	Gly	
					85					90						95	
5	Cys	Gly	Val	Leu	Pro	Ser	Thr	Leu	Arg	Ser	Leu	Pro	Thr	Leu	Arg	Glu	
				100					105					110			
	Leu	His	Leu	Ser	Asp	Asn	Pro	Leu	Gly	Asp	Ala	Gly	Leu	Arg	Leu	Leu	
			115					120					125				
	Cys	Glu	Gly	Leu	Leu	Asp	Pro	Gln	Cys	His	Leu	Glu	Lys	Leu	Gln	Leu	
		130					135					140					
10	Glu	Tyr	Cys	Arg	Leu	Thr	Ala	Ala	Ser	Cys	Glu	Pro	Leu	Ala	Ser	Val	
	145					150					155					160	
	Leu	Arg	Ala	Thr	Arg	Ala	Leu	Lys	Glu	Leu	Thr	Val	Ser	Asn	Asn	Asp	
					165					170					175		
15	Ile	Gly	Glu	Ala	Gly	Ala	Arg	Val	Leu	Gly	Gln	Gly	Leu	Ala	Asp	Ser	
				180					185					190			
	Ala	Cys	Gln	Leu	Glu	Thr	Leu	Arg	Leu	Glu	Asn	Cys	Gly	Leu	Thr	Pro	
			195					200					205				
	Ala	Asn	Cys	Lys	Asp	Leu	Cys	Gly	Ile	Val	Ala	Ser	Gln	Ala	Ser	Leu	
		210					215					220					
20	Arg	Glu	Leu	Asp	Leu	Gly	Ser	Asn	Gly	Leu	Gly	Asp	Ala	Gly	Ile	Ala	
	225					230					235					240	
	Glu	Leu	Cys	Pro	Gly	Leu	Leu	Ser	Pro	Ala	Ser	Arg	Leu	Lys	Thr	Leu	
					245					250					255		
25	Trp	Leu	Trp	Glu	Cys	Asp	Ile	Thr	Ala	Ser	Gly	Cys	Arg	Asp	Leu	Cys	
				260					265					270			
	Arg	Val	Leu	Gln	Ala	Lys	Glu	Thr	Leu	Lys	Glu	Leu	Ser	Leu	Ala	Gly	
			275					280					285				

Asn Lys Leu Gly Asp Glu Gly Ala Arg Leu Leu Cys Glu Ser Leu Leu
290 295 300

Gln Pro Gly Cys Gln Leu Glu Ser Leu Trp Val Lys Ser Cys Ser Leu
305 310 315 320

Thr Ala Ala Cys Cys Gln His Val Ser Leu Met Leu Thr Gln Asn Lys
325 330 335

His Leu Leu Glu Leu Gln Leu Ser Ser Asn Lys Leu Gly Asp Ser Gly
340 345 350

Ile Gln Glu Leu Cys Gln Ala Leu Ser Gln Pro Gly Thr Thr Leu Arg
355 360 365

10 Val Leu Cys Leu Gly Asp Cys Glu Val Thr Asn Ser Gly Cys Ser Ser
370 375 380

Leu Ala Ser Leu Leu Leu Ala Asn Arg Ser Leu Arg Glu Leu Asp Leu
385 390 395 400

15 Ser Asn Asn Cys Val Gly Asp Pro Gly Val Leu Gln Leu Leu Gly Ser
405 410 415

Leu Glu Gln Pro Gly Cys Ala Leu Glu Gln Leu Val Leu Tyr Asp Thr
420 425 430

Tyr Trp Thr Glu Glu Val Glu Asp Arg Leu Gln Ala Leu Glu Gly Ser
435 440 445

20 Lys Pro Gly Leu Arg Val Ile Ser
450 455

<210> 3

<211> 461

<212> PRT

25 <213> Homo sapien

<400> 3

Met Ser Leu Asp Ile Gln Ser Leu Asp Ile Gln Cys Glu Glu Leu Ser
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Asp Ala Arg Trp Ala Glu Leu Leu Pro Leu Leu Gln Gln Cys Gln Val
20 25 30

Val Arg Leu Asp Asp Cys Gly Leu Thr Glu Ala Arg Cys Lys Asp Ile
35 40 45

Ser Ser Ala Leu Arg Val Asn Pro Ala Leu Ala Glu Leu Asn Leu Arg
5 50 55 60

Ser Asn Glu Leu Gly Asp Val Gly Val His Cys Val Leu Gln Gly Leu
65 70 75 80

Gln Thr Pro Ser Cys Lys Ile Gln Lys Leu Ser Leu Gln Asn Cys Cys
85 90 95

10 Leu Thr Gly Ala Gly Cys Gly Val Leu Ser Ser Thr Leu Arg Thr Leu
100 105 110

Pro Thr Leu Gln Glu Leu His Leu Ser Asp Asn Leu Leu Gly Asp Ala
115 120 125

15 Gly Leu Gln Leu Leu Cys Glu Gly Leu Leu Asp Pro Gln Cys Arg Leu
130 135 140

Glu Lys Leu Gln Leu Glu Tyr Cys Ser Leu Ser Ala Ala Ser Cys Glu
145 150 155 160

Pro Leu Ala Ser Val Leu Arg Ala Lys Pro Asp Phe Lys Glu Leu Thr
165 170 175

20 Val Ser Asn Asn Asp Ile Asn Glu Ala Gly Val Arg Val Leu Cys Gln
180 185 190

Gly Leu Lys Asp Ser Pro Cys Gln Leu Glu Ala Leu Lys Leu Glu Ser
195 200 205

25 Cys Gly Val Thr Ser Asp Asn Cys Arg Asp Leu Cys Gly Ile Val Ala
210 215 220

Ser Lys Ala Ser Leu Arg Glu Leu Ala Leu Gly Ser Asn Lys Leu Gly
225 230 235 240

Asp Val Gly Met Ala Glu Leu Cys Pro Gly Leu Leu His Pro Ser Ser
245 250 255

Arg Leu Arg Thr Leu Trp Ile Trp Glu Cys Gly Ile Thr Ala Lys Gly
260 265 270

Cys Gly Asp Leu Cys Arg Val Leu Arg Ala Lys Glu Ser Leu Lys Glu
275 280 285

Leu Ser Leu Ala Gly Asn Glu Leu Gly Asp Glu Gly Ala Arg Leu Leu
290 295 300

Cys Glu Thr Leu Leu Glu Pro Gly Cys Gln Leu Glu Ser Leu Trp Val
305 310 315 320

Lys Ser Cys Ser Phe Thr Ala Ala Cys Cys Ser His Phe Ser Ser Val
325 330 335

Leu Ala Gln Asn Arg Phe Leu Leu Glu Leu Gln Ile Ser Asn Asn Arg
340 345 350

Leu Glu Asp Ala Gly Val Arg Glu Leu Cys Gln Gly Leu Gly Gln Pro
355 360 365

Gly Ser Val Leu Arg Val Leu Trp Leu Ala Asp Cys Asp Val Ser Asp
370 375 380

Ser Ser Cys Ser Ser Leu Ala Ala Thr Leu Leu Ala Asn His Ser Leu
385 390 395 400

Arg Glu Leu Asp Leu Ser Asn Asn Cys Leu Gly Asp Ala Gly Ile Leu
405 410 415

Gln Leu Val Glu Ser Val Arg Gln Pro Gly Cys Leu Leu Glu Gln Leu
420 425 430

Val Leu Tyr Asp Ile Tyr Trp Ser Glu Glu Met Glu Asp Arg Leu Gln
435 440 445

Ala Leu Glu Lys Asp Lys Pro Ser Leu Arg Val Ile Ser
450 455 460